

*Amendments to the Specification*

Please replace the paragraph on page 2, lines 21-32 with the following amended paragraph:

Router 110 sends configuration request packet 130 to router 120 and router 120 ~~send~~ sends configuration request packet 140 to router 110. Router 110 receives configuration request packet 140 and determines that the requested options in configuration request packet 140 are acceptable and assembles a configuration-ACK packet 150. Configuration-ACK packet 150 includes the packet ID of configuration request packet 140, packet ID 121, and an ACK for options OPT-1, OPT-2 and OPT-3. Router 110 sends configuration-ACK packet 150 to router 120. Upon receiving configuration request packet 130, router 120 determines that option OPT-1 is not a supported option and assembles a configuration reject packet 160. Configuration reject packet 160 identifies the packet ID of configuration request packet 130, packet ID 111, and the option that is rejected, OPT-1. Router 120 sends configuration reject packet 160 to router 110.

Please replace the paragraph on page 3, lines 1-10 with the following amended paragraph:

Upon receiving configuration-reject packet 160, router 110 assembles another configuration request packet 170. Configuration request packet 170 includes a packet ID 112 and remaining options, OPT-2, OPT-3 and OPT-4. When router 120 receives configuration request packet 170, router 120 determines that the value of OPT-3 is not acceptable. Router 120 assembles a configuration-NAK packet 180. A configuration-NAK packet is used to indicate that an option ~~that~~ is accepted, but that the value of the option is not supported by the router receiving the request (e.g., router120). Configuration-NAK packet 180 includes the packet ID of configuration request packet 150 (packet ID 112) and NAK for OPT-3 with a suggested value 'E' for OPT-3. Router 120 sends configuration-NAK packet 180 to router 110.

Please replace the paragraph on page 3, lines 23-28 with the following amended paragraph:

During PPP negotiations, each configuration packet travels through link 105 at a speed allowable by the available bandwidth of link 105. In slow link connections (e.g., cell phone data connection), the user information carried at the network layer during a session is often carried in fewer packets than the number of packets used to negotiate the session. A method and apparatus that reduces the time required for the negotiation of a PPP connection is therefore is needed.

Please replace the paragraph on page 8, lines 18-29 with the following amended paragraph:

Conventionally, router 220 waits for the next configuration packet from router 210. However, according to an embodiment of the present invention, router 220 determines that the value '~~B~~' 'C' for option OPT-3 is not acceptable and options ~~OPT-1~~ OPT-2 and OPT-4 are acceptable. Further router 220 then predicts that the next configure request packet from router 210 will include current value '~~B~~' 'C' for OPT-3. Thus, router 220 assembles a configuration-NAK packet 270. Configuration-NAK packet 270 includes a packet ID 212 of the configuration request packet expected next. In the present example, router 220 assumes that the packet ID of next configuration request packet will be packet ID 212. The assumption regarding the packet IDs can be made based on various methods (e.g., methods used: a fixed incremental value predetermined by the network administrator, a knowledge base developed by a router during a topology update or the like).

Please replace the paragraph on page 9, lines 10-25 with the following amended paragraph:

Router 210 receives configuration reject packet 260, configuration-NAK packet 270 and configuration-ACK packet 280. To conform to the current PPP protocol, router 210 also assembles a configure request packet 290 with a packet ID 212 and options OPT-2, OPT-3 with original value '~~B~~' 'C' and OPT-4. Router 210 sends configuration packet 290 to conform to configuration-NAK packet 270 sent by router 220. Router 210 also assembles a configure request packet 295 with a packet ID 213 and options OPT-2, OPT-3 with suggested value 'E' and OPT-4. Router 210 sends configuration request packet 295 to router 220. Configuration request packets 290 and 295 are sent to conform

to current implementation of PPP. When router 220 receives configuration request packets 290 and 295, router 220 discards the packets and no further action is taken. The increase in efficiency of PPP negotiations depends upon the number of configuration packets exchanged between two peers in a network. Typically, more packets are exchanged between two peers in the network to establish and confirm a connection. In the present example, router 220 eliminates the waiting time for two packets, configure-request packets 290 and 295 and begins the next level protocol processing after sending configure-ACK packet 280.

Please replace the paragraph on page 10, line 26 through page 11, line 9 with the following amended paragraph:

Router 320 further determines that OPT-3 is acceptable. However, the value for option OPT-3 is not acceptable although the options ~~OPT-1~~ OPT-2 and OPT-4 are acceptable. Router 320 predicts that the next configure request packet from router 310 will include current value for OPT-3. Thus, router 320 assembles a configuration-NAK packet 365. Router 320 supports a value 'E' for OPT-3. In this example, router 320 assumes that the packet ID of next configuration request packet will be packet ID 312 thus, router 320 includes a packet ID 312 in configuration-NAK packet 365. Configuration-NAK packet 365 further includes a NAK for OPT-3 and suggested value 'E' for OPT-3. Next, router 320 predicts that after receiving configuration-NAK packet 365, router 310 will send a configuration request packet with acceptable values (OPT-2, OPT-3 with value 'E' and OPT-4). Thus, router 320 assembles a configuration-ACK packet 370. Configuration-ACK packet 370 includes assumed packet ID, packet ID 313, of expected acceptable configuration request packet. Configuration-ACK packet 370 further includes an ACK for options OPT-2, OPT-3 and OPT-4. Router 320 sends configuration-NAK packet 365 and configuration-ACK packet 370 to router 310. After sending configuration-ACK packet 370 to router 310, router 320 sets the internal state of the requested session to 'ACK-sent'.